



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,718	09/25/2003	Kouji Yokouchi	2091-0297P	6370
2292 7590 03/07/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER PATEL, JAYESH A	
			ART UNIT 2624	PAPER NUMBER
			NOTIFICATION DATE 03/07/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/669,718	Applicant(s) YOKOUCHI, KOUJI	
	Examiner Jayesh A. Patel	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's response to the last office action, filed January 22, 2008 has been entered and made of record.
2. Applicant's amendment has required new grounds of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-7, 9-13, 15-19, 21- 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta (EP 0924648 A2) hereafter Ohta in view of Noyama et al. (US 5594850) hereafter Noyama.

3. Regarding Claim 1, Ohta discloses a method of performing image processing on an image synthesized from a natural image and a computer graphic (CG) image (**Fig 26 and Fig 27**). Ohta further discloses providing a specification (**of separating a composite image made up of user image and the template image i.e. natural and CG image**) of the first (**user image**) and second regions

(template image) in said synthesized image in image synthesizer in fig 26, the first region comprising the natural image (user image); Ohta also discloses **separating** said synthesized image into a natural-image region (**User Image**) and a CG-image region (**template image**) at **(Fig 26 and Fig 27 Block 132)** wherein said separating includes removing **(separating the template and user images with the help of mask information will be removing the pixels designated as the part of template or CG image from the first region or the user image)**. Ohta also discloses designating and extracting **(cut out or partial image)** from not only a natural image but also an image **(synthesized image)** represented using a color palette **(specified color pixels)** at **(Paras 18-21 Page 3)**. Ohta further discloses computing an image-processing parameter for said image processing, based on said natural-image region **(Block 133 Fig 27 and Page 2 Para 0010-0015 where the color correction parameter is decided for the user image or the natural image)**; acquiring an intermediate image by performing said image processing on said synthesized image **(Fig 26 and Fig 27 Block 133 where the separating and color conversion of the synthesized image will obtain an intermediate images of the user image and the template images. This is seen in Fig 26 in the image synthesizer)**, based on said image processing parameter; and acquiring a processed image by synthesizing said natural-image region contained in said intermediate image **(image after color conversion image at step 7 in fig 26)** and said CG-image region **(image after color conversion image at step 7 in fig 26)** contained in

said synthesized image (**Fig 26 and Fig 27 Block 134**). Ohta discloses masking and designating pixels as seen in Fig 26 and 27, however is silent and does not recite determining a color of pixels in the second region; distinguishing each pixel in the first region, which is judged to have the same color as the color of pixels in the second region as being part of the CG-image.

Noyama discloses determining a color of pixels in the second region; distinguishing each pixel in the first region, which is judged to have the same color as the color of pixels in the second region as being part of the CG-image at (**Col 9 Lines 7-21 where the pixels in the region common (judged to have the same color) to the natural (first) region and the CG (second) regions are taken from the CG region (as being part of the CG region)**). Noyama discloses that the processing is automatic and the need for the human operator is eliminated (analyzing color) which would bring erroneous results at (**Col 5 Lines 24-30**). Ohta and Noyama are from the same field of endeavor and are analogous art, therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made to have used the teachings of Noyama in the apparatus and method of Ohta for the above reasons.

4. Regarding claim 3, Ohta and Noyama discloses the method as set forth in claim 1. Ohta further discloses wherein said synthesized image is obtained by reading out synthesized image data from a storage medium in (**Fig 1 Element 1, 11 and Page 6 Lines 20-42**).

5. Regarding Claim 4, Ohta and Noyama discloses a method as set forth in Claim 1. Ohta further discloses wherein specification of a region containing said natural image is received at **(Page 3 Lines 15-24 and Lines 32-33)**; said synthesized image is separated into said natural-image contained region and the remaining region at **(Page 3 Lines 21-24)**; and said natural-image region and said CG-image region are separated from each other by removing **(replace)** a region that has the same color as a color contained in said remaining region, from said region containing said natural-image at **(Page 3 Lines 15-24)**.

6. Regarding Claim 5, Ohta and Noyama discloses the method as set forth in claim 1. Ohta Further discloses wherein said separated natural image and CG image are displayed in **(Fig 26 Element 6 and Col 8 Lines 22-28)**. Noyama also discloses the images displayed in Fig 8.

7. Regarding Claim 6, Ohta and Noyama discloses the method as set forth in claim 1. Ohta further disclose wherein a maximum rectangular region that is inscribed in said natural-image region is set; and said image-processing parameter is computed based on an image within said maximum rectangular region at **(Fig 18 and Page 3 Lines 29 –31)**. The rectangle circumscribes the extracted region from the natural image and the pixel data and the coordinate data **(color correction or image processing)** are produced based on the

extracted data. Noyama also discloses the rectangular region 55 inscribing said natural image (**head of the person is seen in region 55**) is set as seen in Fig 8.

8. Claim 7 is a corresponding image processor Claim of Claim 1. See the explanation of Claim 1.

9. Claim 9 is a corresponding image processor Claim of Claim 3. See the explanation of Claim 3.

10. Claim 10 is a corresponding image processor Claim of Claim 4. See the explanation of Claim 4.

11. Claim 11 is a corresponding image processor Claim of Claim 5. See the explanation of Claim 5.

12. Claim 12 is a corresponding image processor Claim of Claim 6. See the explanation of Claim 6.

13. Claim 13 is a corresponding system Claim of a method of Claim 1. See the explanation of Claim 1.

14. Claim 15 is a corresponding system Claim of a method of Claim 3. See the explanation of Claim 3.

15. Claim 16 is a corresponding system Claim of a method of Claim 4. See the explanation of Claim 4.

16. Claim 17 is a corresponding system Claim of a method of Claim 5. See the explanation of Claim 5.

17. Claim 18 is a corresponding system Claim of a method of Claim 6. See the explanation of Claim 6.

18. Claim 19 is a corresponding Computer readable storage device having recorded the program for causing the computer to execute the method of Claim 1. See the explanation of Claim 1.

19. Claim 21 is a corresponding Computer readable storage device having recorded the program for causing the computer to execute the method of Claim 3. See the explanation of Claim 3.

20. Claim 22 is a corresponding Computer readable storage device having recorded the program for causing the computer to execute the method of Claim 4. See the explanation of Claim 4.

21. Claim 23 is a corresponding Computer readable storage device having recorded the program for causing the computer to execute the method of Claim 5. See the explanation of Claim 5.

22. Claim 24 is a corresponding Computer readable storage device having recorded the program for causing the computer to execute the method of Claim 6. See the explanation of Claim 6.

Claims 2,8,14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta, Noyama in further view of Joshi et al (US 5982381) hereafter Joshi.

23. Regarding Claim 2, Ohta and Noyama discloses the method as set forth in claim 1. Ohta and Noyama however does not disclose wherein a boundary portion between said natural-image region and CG-image region contained in said synthesized image is blurred and then said CG-image region in said synthesized image and said natural-image region in said intermediate image are synthesized.

Joshi discloses wherein a boundary portion between said natural-image region and CG-image region contained in said synthesized image is blurred and then said CG-image region in said synthesized image and said natural-image region in said intermediate image are synthesized at **(Col 1 Lines 19-45 and Col 5 Lines 54-60)**. Joshi also discloses generating a distance mask using chamfering technique. Joshi also discloses the invention provides high calculation efficiency and fast response at **(Col 2 Lines 12-15)**. Ohta, Noyama and Joshi are from the same field of endeavor and are analogous art, therefore it would have been obvious for one of ordinary skill in the art at the time the invention was made, to use image blurring techniques as taught by Joshi in smoothing the boundary edges in the image processing method and apparatus of Ohta and Noyama for the above reasons.

24. Claim 8 is a corresponding Image processor performing a method of Claim 2. Therefore see the explanation of Claim 2.

25. Claim 14 is a system performing corresponding method of Claim 2. Therefore see the explanation of Claim 2.

26. Claim 20 is a Computer readable storage device performing a method of Claim 2. Therefore see the explanation of Claim 2.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jayesh A. Patel whose telephone number is 571-270-1227. The examiner can normally be reached on M-F 7.00am to 4.30 pm (5-4-9). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571-272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jayesh Patel
02/23/08

JP

JINGGE WU
SUPERVISOR PATENT EXAMINER